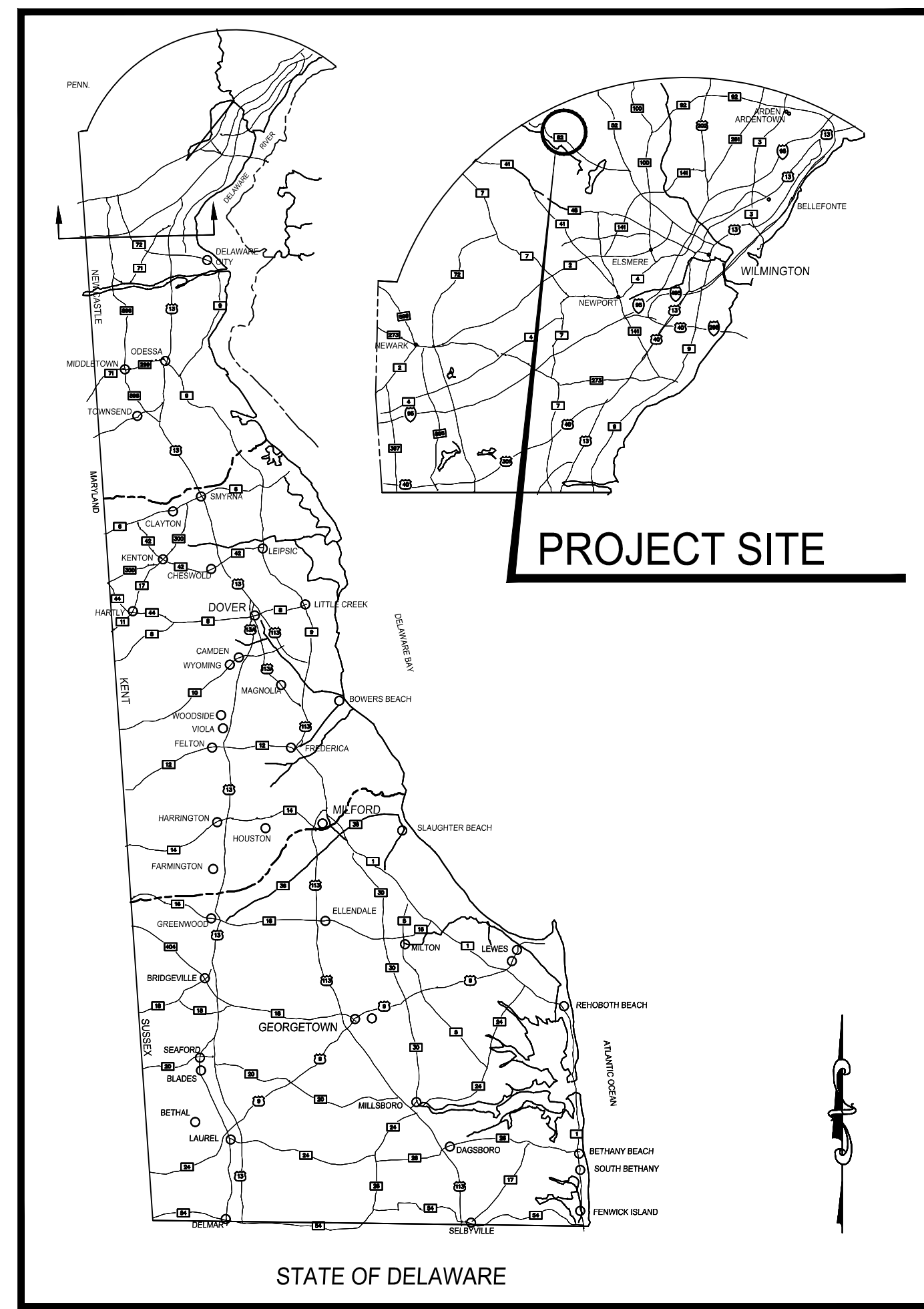
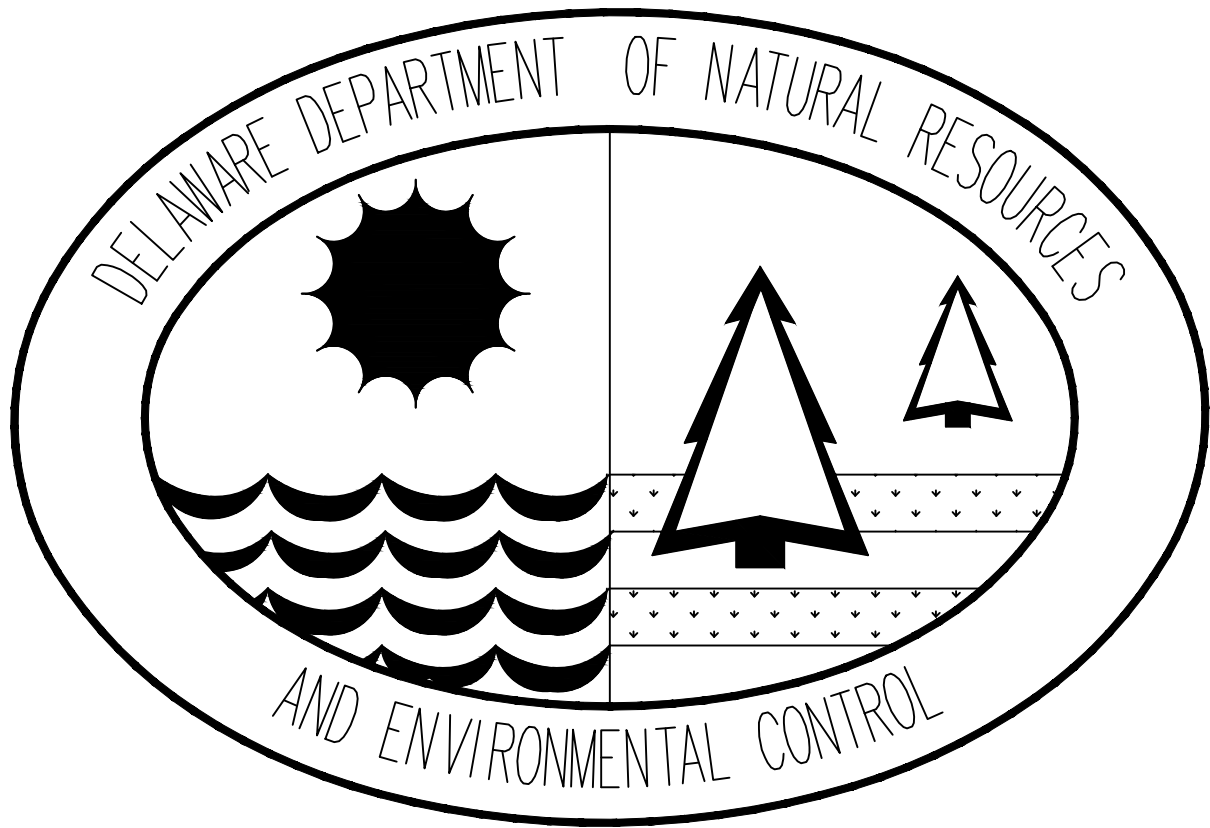


STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL  
DIVISION OF PARKS & RECREATION

AUBURN VALLEY MASTER PLAN  
AREA REDEVELOPMENT OF NVF SITE  
BENGE ROAD PUMP STATION REPLACEMENT

PARKS PROJECT NO. AVSP-NVF-5  
CONTRACT NO. 2019-AVSP-100

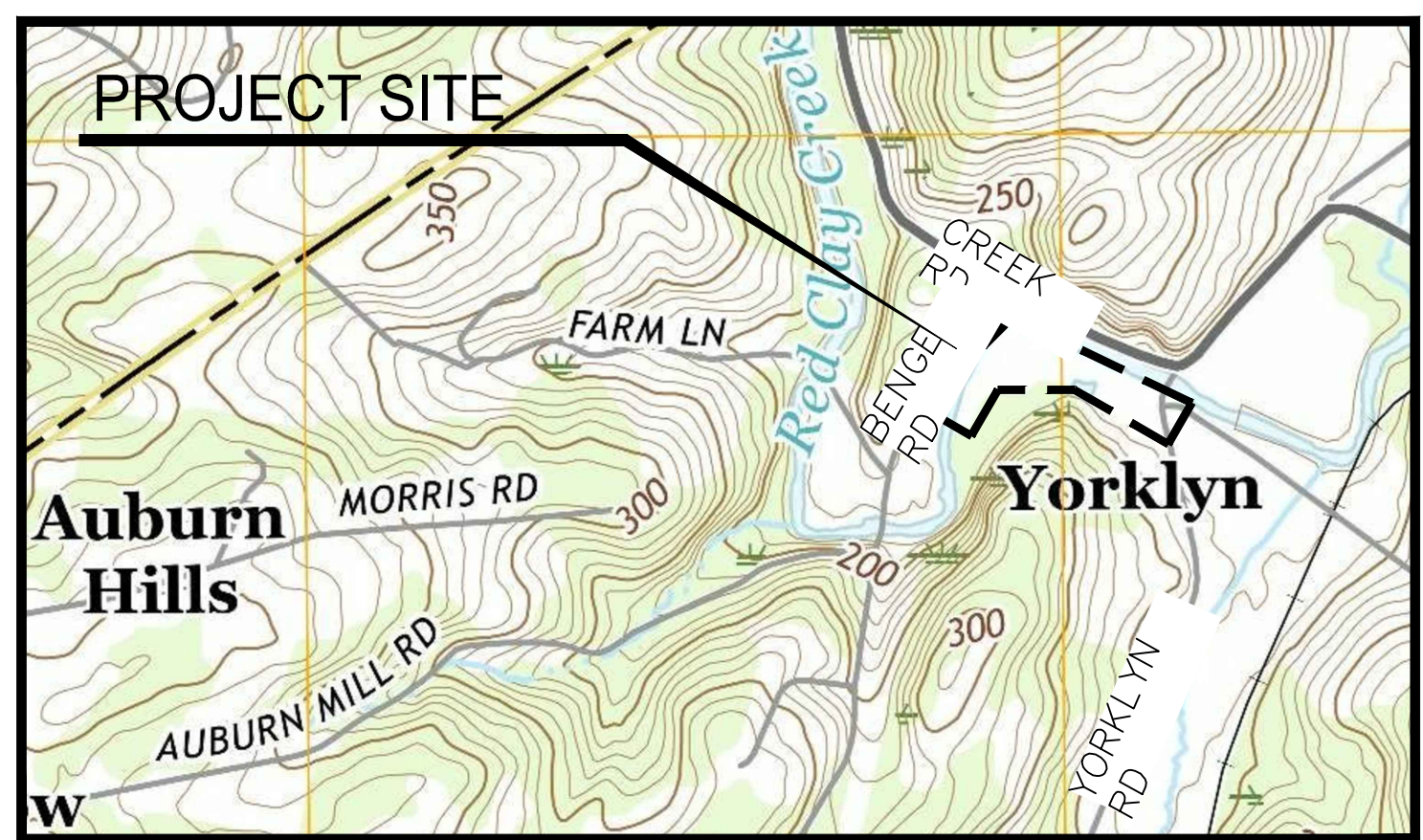
OCTOBER 18, 2019



LOCATION MAP

EXISTING CONDITIONS LEGEND

	BUILDING		SOIL BORING
	ASPHALT PAVEMENT		SITE BENCHMARK
	CONCRETE PAVEMENT		CATCH BASIN (RECTANGLE)
	BRIDGE		SANITARY MANHOLE
	FLOODWAY		VENT
	100 YEAR FLOODPLAIN		ELECTRIC BOX
	100 YEAR FLOODPLAIN BOUNDARY		LIGHT POLE
	182 BASE FLOOD ELEVATION		UTILITY POLE
	WALL		GUY WIRE
	FENCE		SIGN (SINGLE POST)
	GUARD RAIL		SIGN (DOUBLE POST)
	TREE LINE		BOLLARD/POST
	SANITARY PIPE		MAILBOX
	5 CONTOUR MAJOR (5' INTERVAL)		SPOT ELEVATION
	CONTOUR MINOR (1' INTERVAL)		TREE (DECIDUOUS)
	PROPERTY LINE		TREE (CONIFEROUS)
	OVERHEAD WIRES		
	EDGE OF PAVEMENT		
	EDGE OF WATER		
	WETLAND BOUNDARY		



SITE MAP  
SCALE: 1" = 800'

- SITE DATA
- APPLICATION NO.:
  - TAX PARCEL NO.: 07-009.00-002, 08-001.00-0021
  - TAX PARCEL ADDRESS: 628 BENGE ROAD, YORKLYN, DE 19736; 1165 YORKLYN ROAD, YORKLYN, DE 19736
  - OWNER/DEVELOPER: STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL DIVISION OF PARKS & RECREATION
  - DATUM: DELAWARE STATE PLANE NAD 83, NAVD 88
  - BENCHMARK: SEE BENCHMARK TABLE

- GENERAL NOTES
- SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES OR STRICTER STANDARDS IDENTIFIED BY THE ENGINEER.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN APPROVAL AND ACCEPTANCE OF THE SANITARY SEWER SYSTEM BY ENGINEER UPON COMPLETION OF CONSTRUCTION. AS-BUILT PLANS SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF DELAWARE MUST BE SUBMITTED TO ENGINEER BEFORE ACCEPTANCE.
  - DURING CONSTRUCTION, THE CONTRACTOR MUST HAVE IN THEIR POSSESSION ON SITE, A SET OF CONSTRUCTION PLANS BEARING NEW CASTLE COUNTY'S STAMP OF APPROVAL.
  - THE CONTRACTOR SHALL NOT PLACE, PLANT, PUT, OR SET ANY STRUCTURE WITHIN THE SANITARY SEWER EASEMENT.
  - A CONSTRUCTION PERMIT ISSUED BY THE STATE OF DELAWARE, DEPARTMENT OF TRANSPORTATION (DELDOT) IS REQUIRED BEFORE ANY WORK IS PERFORMED WITHIN A DELDOT RIGHT-OF-WAY. ALL WORK PERFORMED WITHIN DELDOT'S RIGHT-OF-WAY OR PROPERTY OWNED BY THE STATE OF DELAWARE SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST RECENT DELDOT STANDARD SPECIFICATIONS AND UTILITY MANUAL.
  - SANITARY SEWER IS TO BE PRIVATELY OWNED AND MAINTAINED BY STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL DIVISION OF PARKS & RECREATION.
  - CONSTRUCTION SHALL NOT DEVIATE FROM THE PLANS AND SPECIFICATIONS APPROVED BY NEW CASTLE COUNTY WITHOUT WRITTEN PERMISSION FROM NEW CASTLE COUNTY'S DEPARTMENT OF SPECIAL SERVICES.
  - EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK AND THE NEW CASTLE COUNTY DRAINAGE CODE, AS AMENDED.
  - TYPICAL SEQUENCE OF CONSTRUCTION:
    - CONTACT NEW CASTLE COUNTY DEPARTMENT OF SPECIAL SERVICES (TWO BUSINESS DAYS NOTICE AT 395-5756) PRIOR TO TIE-INS TO EXISTING LINES.
    - CONSTRUCT PROPOSED SANITARY SEWER SYSTEM AS APPROVED BY NEW CASTLE COUNTY.
    - BACKFILL AND RE-GRADE AS REQUIRED.
  - MANHOLE COVER(S) ON PRIVATELY OWNED AND MAINTAINED SEWER SYSTEMS SHALL NOT BE LABELED "NEW CASTLE COUNTY".

DELAWARE STATE PARKS  
FLOW PROJECTION FOR BENGE ROAD PS

PHASE 1	DIMENSIONS	SQUARE FEET	NO.	GPD/SF	GPD/UNIT	GPD
PARK OFFICE	44' X 24'	1056	1	0.1	-	106
SINGLE FAMILY RESIDENTIAL UNITS	-	-	4	-	300	1200
PAPER MILL - RESIDENTIAL UNITS	315' X 70'	22,050	15	-	300	4,410
PAPER MILL - RETAIL	115' X 36'	4140	-	0.1	-	414
MUSEUM	100' X 50'	5000	-	0.1	-	500
REPAIR SHOP	100' X 30'	3000	1	-	300	300
MANSION	-	-	1	-	300	300
TOTAL						7,230
PEAK FLOW						20 GPM

BENCHMARK TABLE

BENCHMARK	NORTH	EAST	ELEVATION	DESCRIPTION
BM-21	658531.6260'	583315.3140'	176.66'	MAG
BM-22	658746.8680'	582692.2310'	174.66'	MAG
BM-23	658841.8270'	582457.9350'	187.22'	MAG

INDEX OF SHEETS FOR CONTRACT NO.  
2019-AVSP-100

SHEET NO.:	TITLE
G-01	COVER SHEET-SHEET INDEX
C-01	FORCE MAIN PLAN
C-02	FORCE MAIN PROFILE
C-03	FORCE MAIN DETAILS 1
C-04	FORCE MAIN DETAILS 2
D-01	PUMP STATION PLAN AND SECTIONS
E-01	PUMP STATION - OVERALL PLAN
E-02	PUMP STATION - PARTIAL PLAN
E-03	PUMP STATION - SINGLE LINE
E-04	PUMP STATION - INTERCONNECT
E-05	PUMP STATION - DETAILS
E-06	PUMP STATION - DETAILS
E-07	PUMP STATION - DETAILS
E-08	PUMP STATION - WIRING DIAGRAMS
E-09	PUMP STATION - DIAGRAM & SCHEDULES

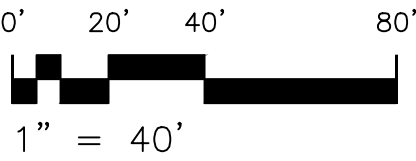
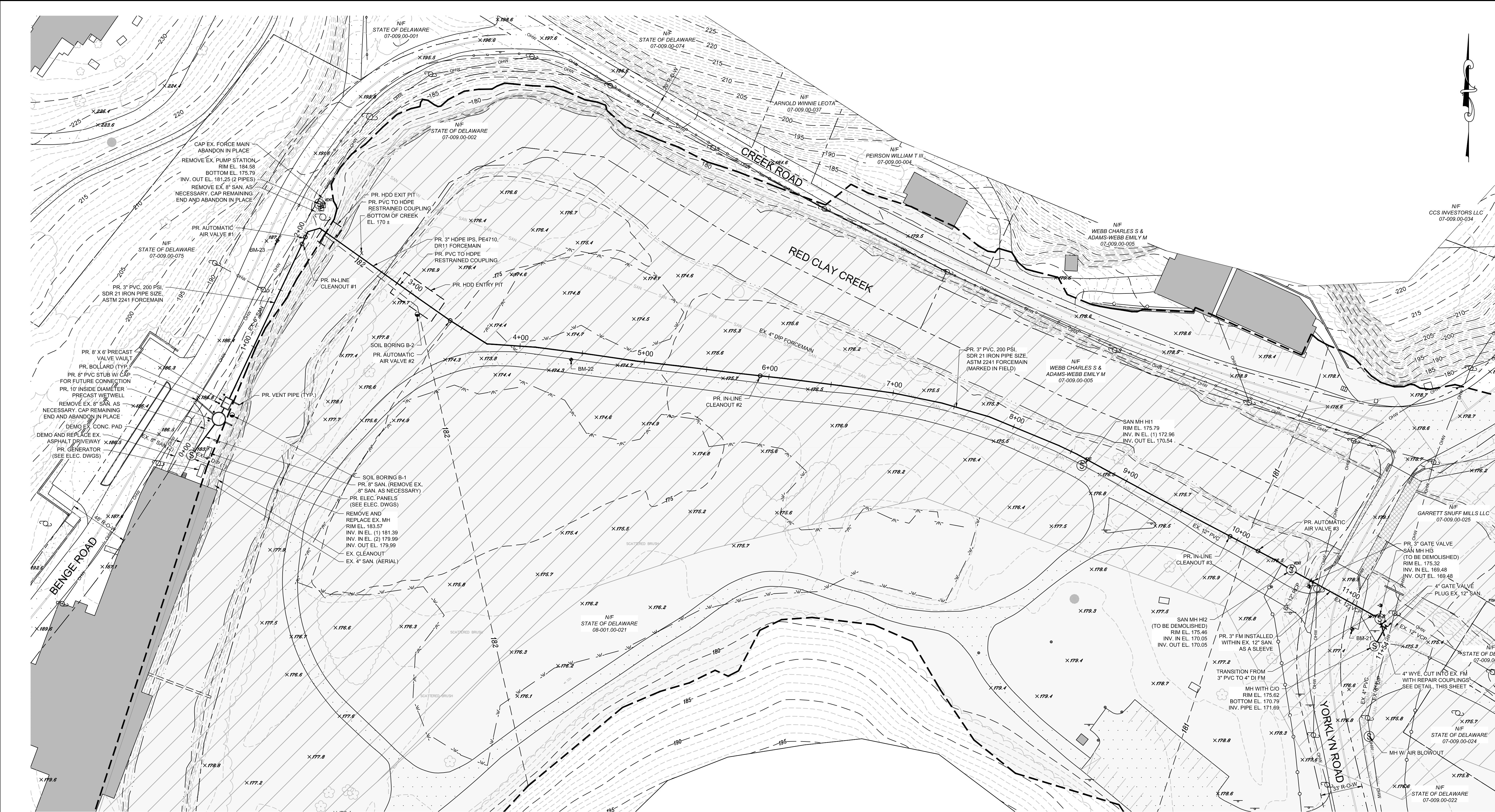
PURPOSE STATEMENT

PRIVATE SANITARY SEWER PUMPING STATION REPLACEMENT OWNED AND OPERATED BY STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL DIVISION OF PARKS & RECREATION FOR THE PURPOSE OF AUBURN VALLEY MASTER PLAN AREA REDEVELOPMENT, BENGE ROAD AREA.

PRELIMINARY - NOT FOR CONSTRUCTION

<p>PROFESSIONAL ENGINEER CERTIFICATION:</p> <p>I, _____, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE WITH A BACKGROUND IN CIVIL ENGINEERING AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, I CERTIFY THAT ALL OF THE INFORMATION ON THESE SANITARY SEWER DRAWINGS IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY ACCEPTED SURVEYING AND ENGINEERING STANDARDS AND PRACTICES AND BY THE NEW CASTLE COUNTY UNIFIED DEVELOPMENT CODE. ADDITIONALLY, THE SANITARY SEWER DESIGN HAS BEEN PREPARED IN ACCORDANCE WITH AND COMPLIES WITH ALL APPLICABLE REGULATIONS, CODES, STANDARDS, GUIDELINES, LAWS AND POLICIES, INCLUDING BUT NOT LIMITED TO CHAPTER 38 OF THE NEW CASTLE COUNTY CODE, THE DEPARTMENT OF SPECIAL SERVICES POLICIES #6 AND #7, THE NEW CASTLE COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND AMENDMENTS AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.</p>	<p>OWNER'S CERTIFICATION:</p> <p>I, _____, HEREBY CERTIFY THAT I AM THE CURRENT, LEGAL OWNER OF THE PROPERTY TO BE SEWERED AND THAT THE SANITARY SEWER WILL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS, CODES, STANDARDS, GUIDELINES, LAWS AND POLICIES, INCLUDING BUT NOT LIMITED TO CHAPTER 38 OF THE NEW CASTLE COUNTY CODE, THE DEPARTMENT OF SPECIAL SERVICES POLICIES #6 AND #7, THE NEW CASTLE COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND AMENDMENTS AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.</p>	<p>FOR USE BY DEPARTMENT OF PUBLIC WORKS</p>	<p>CIVIL ENGINEER</p> <p>AECOM SABRE BUILDING, SUITE 300 4051 OGLETOWN ROAD NEWARK, DE 19713 (302) 781-5900 (302) 781-5901 (FAX) ED STRAUSS ed.strauss@aecom.com</p> <p>STAMP</p>	<p>MEP ENGINEER</p> <p>KEYSTONE ENGINEERING GROUP 590 EAST LANCASTER AVENUE SUITE 200 FRAZER, PA 19355 (610) 407-4100 (610) 407-4101 (FAX) CURTIS JAMES cjames@kegi.net</p> <p>STAMP</p>	<p>CLIENT</p> <p>OFFICE OF DESIGN &amp; DEVELOPMENT DELAWARE DIVISION OF PARKS &amp; RECREATION 89 KINGS HIGHWAY DOVER, DELAWARE 19901 (302) 739-9231 (302) 739-7026 (FAX) JULIO SENEUS julio.seneus@delaware.gov</p>
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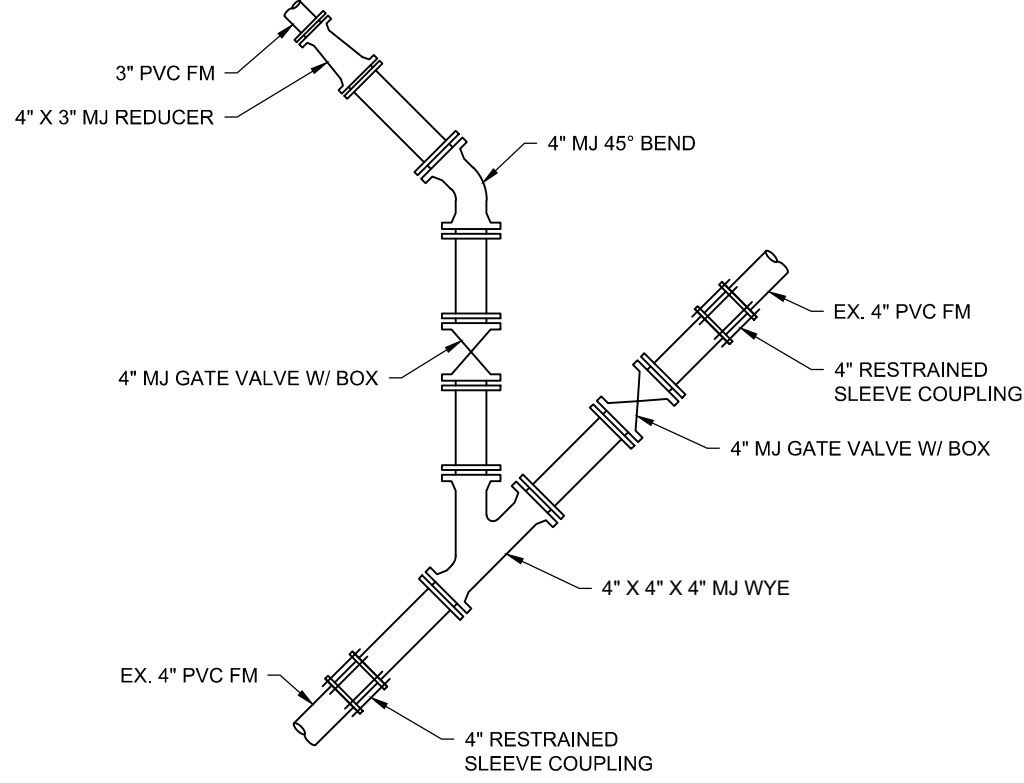


HORIZONTAL DIRECTIONAL DRILLING (HDD) NOTES

1. CONTRACTOR TO DETERMINE FINAL HDD ALIGNMENT, HDD PLAN AND PROFILE AS SHOWN ON THE DRAWINGS ARE CONCEPTUAL ONLY.
2. CONTRACTOR SHALL DETERMINE LOCATIONS OF HDD ENTRY AND EXIT POINTS. ENTRY/EXIT PIT LOCATIONS AS SHOWN ON THE DRAWINGS ARE CONCEPTUAL ONLY.
3. CONTRACTOR SHALL DETERMINE MINIMUM CLEARANCE REQUIRED BENEATH BOTTOM OF CREEK.
4. HDPE PIPE SHALL BE DR11 (200 PSI) MINIMUM, UNLESS CONTRACTOR DETERMINES THICKER WALL IS REQUIRED.
5. AFTER INSTALLATION AND TESTING OF HDD, INSTALL HDPE-TO-PVC TRANSITIONS TO PROVIDE 42" MINIMUM COVER OVER FORCEMAIN PIPE.
6. PRIOR TO HDD WORK, CONTRACTOR SHALL SUBMIT HDD WORK PLAN AND CONTINGENCY PLANS FOR FUEL, HYDRAULIC, AND DRILLING FLUID RELEASES.

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO ORDERING AND/OR FABRICATION OF ANY MATERIALS.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
3. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND WILL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, EXCEPT FOR EROSION AND SEDIMENT SEQUENCE OF CONSTRUCTION WHICH WILL BE CONDUCTED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN/DETAILS AND THE DE EROSION AND SEDIMENT CONTROL HANDBOOK.
4. THE CONTRACTOR SHALL PATCH, REPAIR AND FINISH ALL DAMAGED SURFACES CAUSED BY THE WORK, USING MATERIALS OF THE SAME KIND.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT HIS EXPENSE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF DAMAGED OR DESTROYED LANDSCAPE.
7. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AREAS WITH 4" OF TOP SOIL THEN SEED AND MULCH IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
8. EXCAVATIONS SHALL BE KEPT DRY.
9. ALL PIPING SHALL BE HYDROSTATICALLY PRESSURE TESTED AND FLUSHED PRIOR TO USE IN ACCORDANCE WITH AWWA C600.
10. THESE PLANS ARE BASED ON INFORMATION AVAILABLE AT THE TIME THEY WERE PREPARED. ACTUAL CONDITIONS MAY VARY.
11. CONSTRUCTION SURVEY STAKING TO BE PROVIDED BY THE CONTRACTOR. ALL WORK SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS OF THIS PROJECT UNLESS AUTHORIZED IN WRITING.
12. EXISTING CONDITIONS ARE SHOWN IN LIGHT DASHED LINE AND/OR SCREENED. NEW FACILITIES ARE SHOWN SOLID HEAVY LINED.
13. COMPLETE CONSTRUCTION IN ACCORDANCE WITH LOCAL CODES AND OSHA REQUIREMENTS.
14. FABRICATE AND INSTALL MATERIALS, EQUIPMENT, PRODUCTS AND FINISHES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
15. STRICTLY ADHERE TO PLAN LOCATIONS AND DIMENSIONS UNLESS OTHERWISE DIRECTED BY THE OWNER OR ITS REPRESENTATIVE IN WRITING.
16. CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS REQUIRED FOR CONSTRUCTION PRIOR TO THE INITIATION OF WORK.
17. NOTIFY THE OWNER AND COUNTY 48 HOURS IN ADVANCE OF WORK TO BE COMPLETED ON THE EXISTING STRUCTURES OR PIPING.
18. PROTECT UTILITY LINES AND APPURTENANCES THAT ARE TO REMAIN. UTILITY LOCATIONS HAVE BEEN SHOWN BASED ON HISTORICAL FACILITY INFORMATION AND HAVE NOT BEEN FIELD VERIFIED. LOCATE AND VERIFY EXISTING UTILITIES. CONTACT THE NATIONAL CONSTRUCTION ALERT SYSTEM FOR UTILITIES AT 811. APPLY APPROPRIATE SURFACE GEOPHYSICAL METHODS TO LOCATE SUBSURFACE UTILITIES. REPAIR DAMAGE EXCEPT WHEN UTILITY IS TO BE ABANDONED IN PLACE.
19. NO ADDITIONAL PAYMENT SHALL BE MADE FOR FITTINGS REQUIRED TO AVOID UTILITIES NOT IDENTIFIED BY THE MISS UTILITY SYSTEM DESIGN NOTICE. PROPOSED MAIN SHALL BE DEFLECTED WHERE POSSIBLE TO AVOID EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE LOCATED BY THE CONTRACTOR BY TEST PIT PRIOR TO THE START OF PIPE INSTALLATION.  
MISS UTILITY TICKET NO.: 191210416, 191210426
20. MAXIMUM TRENCH WIDTH SHALL BE 24".
21. UPON COMPLETION OF ALL PAVEMENT RESTORATION, CONTRACTOR SHALL RESTORE ALL TRAFFIC MARKINGS AND STRIPING.
22. CONTRACTOR TO COORDINATE CONNECTION TO EXISTING FORCE MAIN WITH NEW CASTLE COUNTY DEPARTMENT OF PUBLIC WORKS (NCC DPW). PROVIDE AT LEAST 48 HOURS NOTICE PRIOR TO CONSTRUCTION. COORDINATE CONSTRUCTION SCHEDULE WITH NCC DPW.
23. CONTRACTOR TO PROVIDE MAINTENANCE OF FLOWS FOR UNINTERRUPTED SEWAGE SERVICE DURING CONSTRUCTION.
24. EXISTING SEWAGE FORCE MAIN INFORMATION BASED ON AS-BUILT RECORD DRAWINGS FOR YORKLYN SEWAGE PUMPING STATION FORCE MAIN & GRAVITY SEWERS, PROJECT NO. Z-02 & 608, CONTRACT NO. 1996-19, DATED 10/9/98



FORCE MAIN TIE-IN DETAIL

SCALE: NTS

PRELIMINARY - NOT FOR CONSTRUCTION

AECOM

PROJECT

Auburn Valley Master Plan  
Area Redevelopment  
of NVF Site  
Benge Road  
Pump Station Replacement

CLIENT

STATE OF DELAWARE

Department of Natural Resources  
and Environmental Control  
Division of Parks and Recreation  
89 Kings Highway  
Dover, DE 19901  
302.739.9220 tel  
www.destateparks.com

CONSULTANT

AECOM  
Sabre Building, Suite 300  
4051 Ogletown Road  
Newark, DE 19713  
302.781.5900 tel 302.781.5901 fax  
www.aecom.com

SUBCONSULTANTS

ELECTRICAL

Keystone Engineering Group  
590 East Lancaster Avenue  
Suite 200  
Frazier, PA 19355  
610.407.4100 tel 610.407.4101 fax  
www.kegi.net

REGISTRATION

ISSUE/REVISION

5	10/18/19	PER NCC COMMENT
4	8/21/19	FOR NCC APPROVAL
3	8/1/19	95% DESIGN SUBMITTAL
2	6/7/19	90% DESIGN SUBMITTAL
1	5/24/19	30% DESIGN SUBMITTAL
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

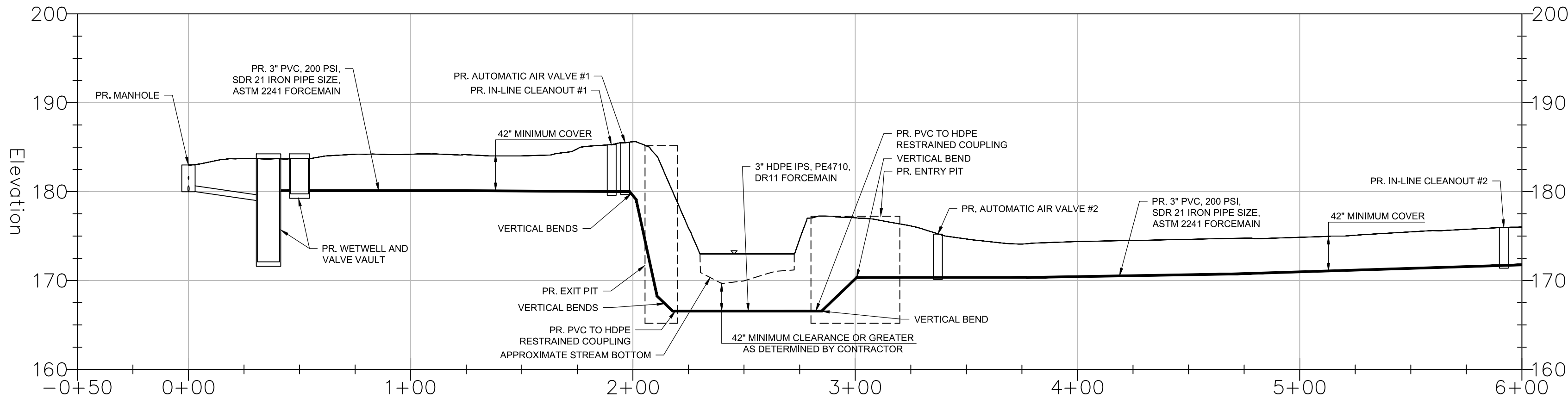
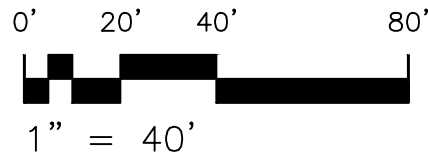
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SHEET TITLE

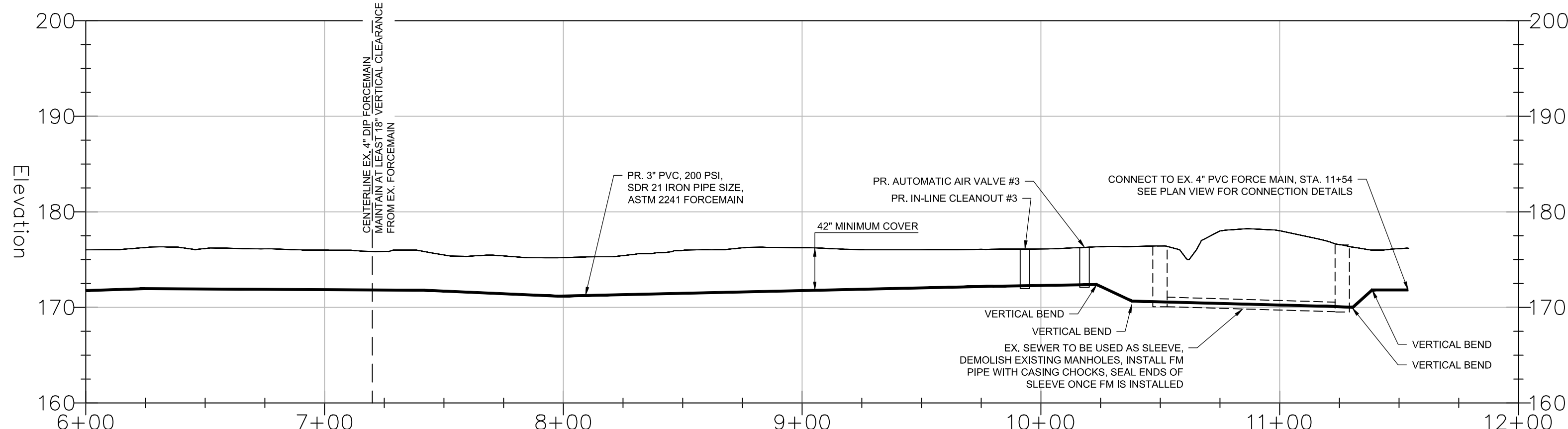
FORCE MAIN PLAN

SHEET NUMBER

C-01



FORCE MAIN PROFILE  
SCALE: 1" = 40' H / 1" = 10' V



FORCE MAIN PROFILE  
SCALE: 1" = 40' H / 1" = 10' V

PROJECT

Auburn Valley Master Plan  
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Pump Station Replacement

CLIENT

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I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60593246

SHEET TITLE

FORCE MAIN PROFILE

SHEET NUMBER

C-02

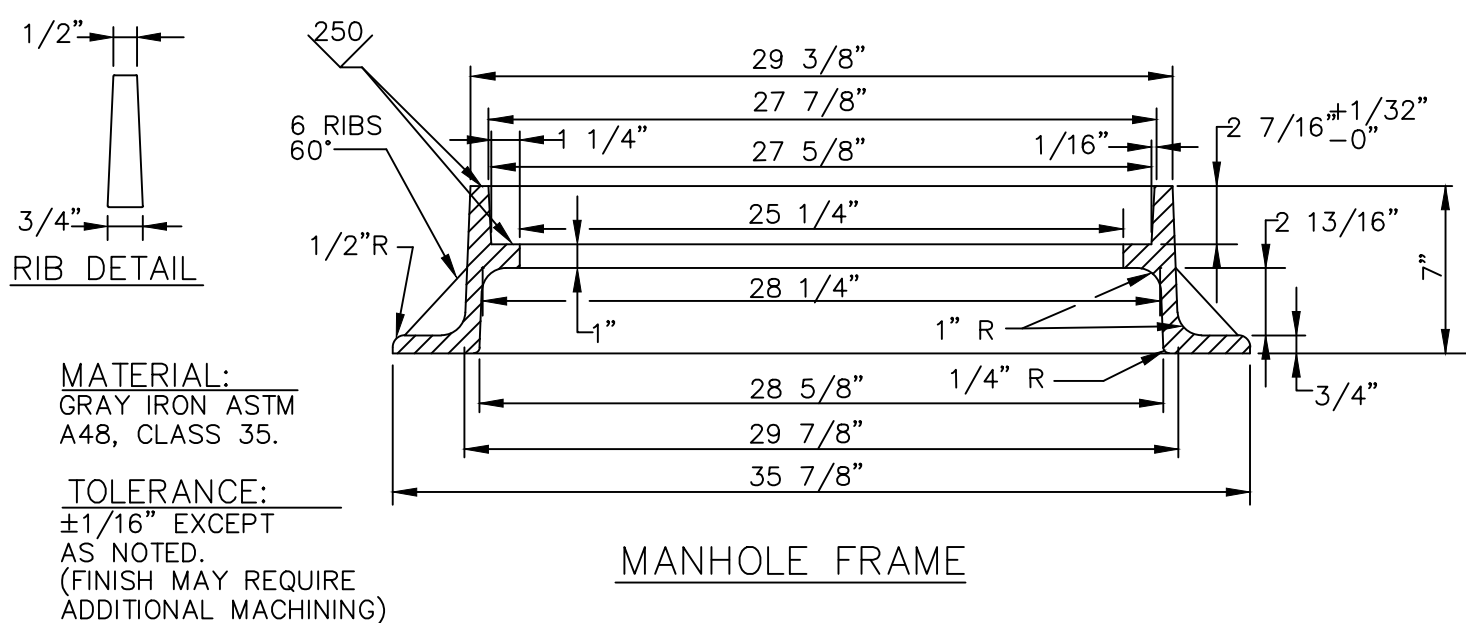
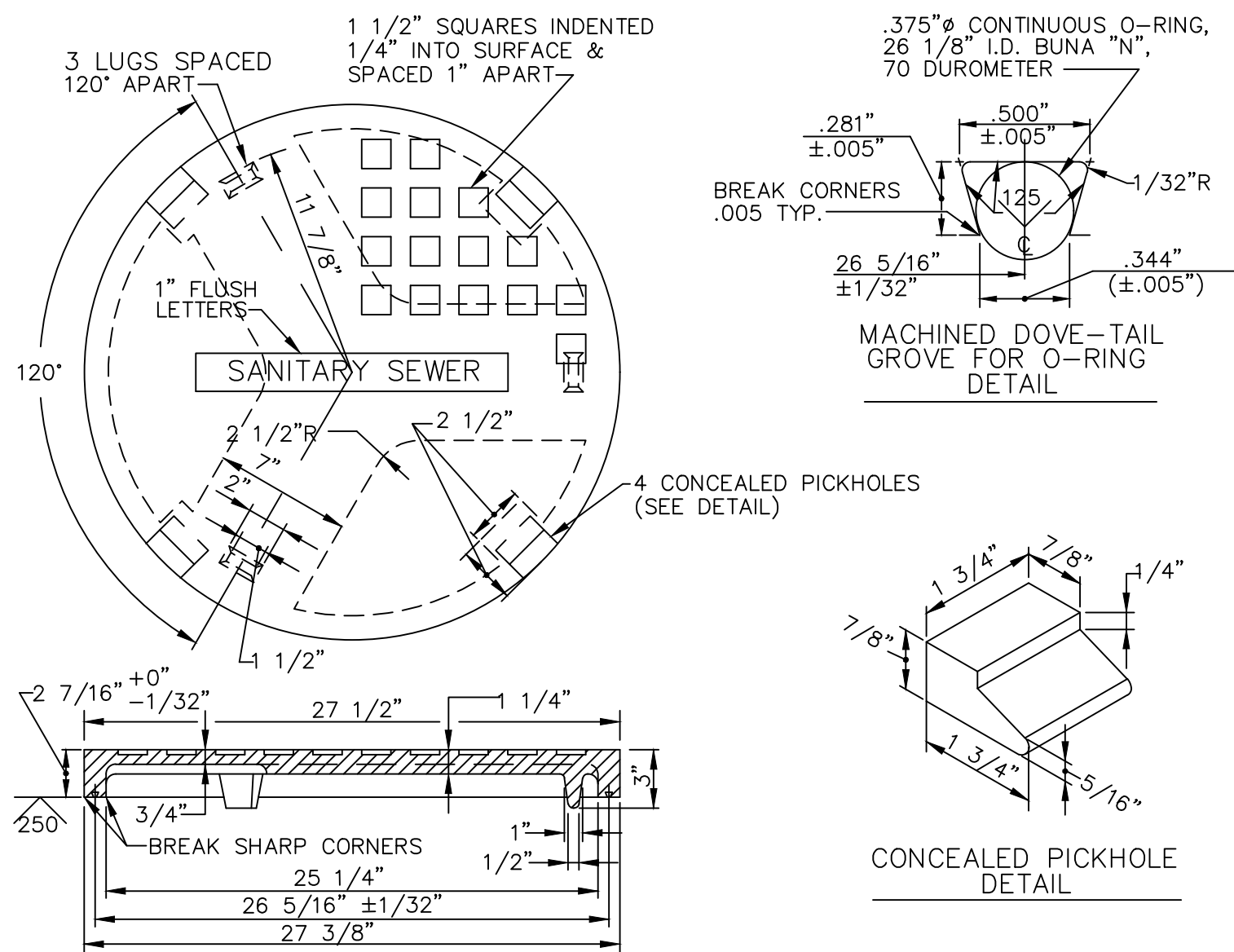
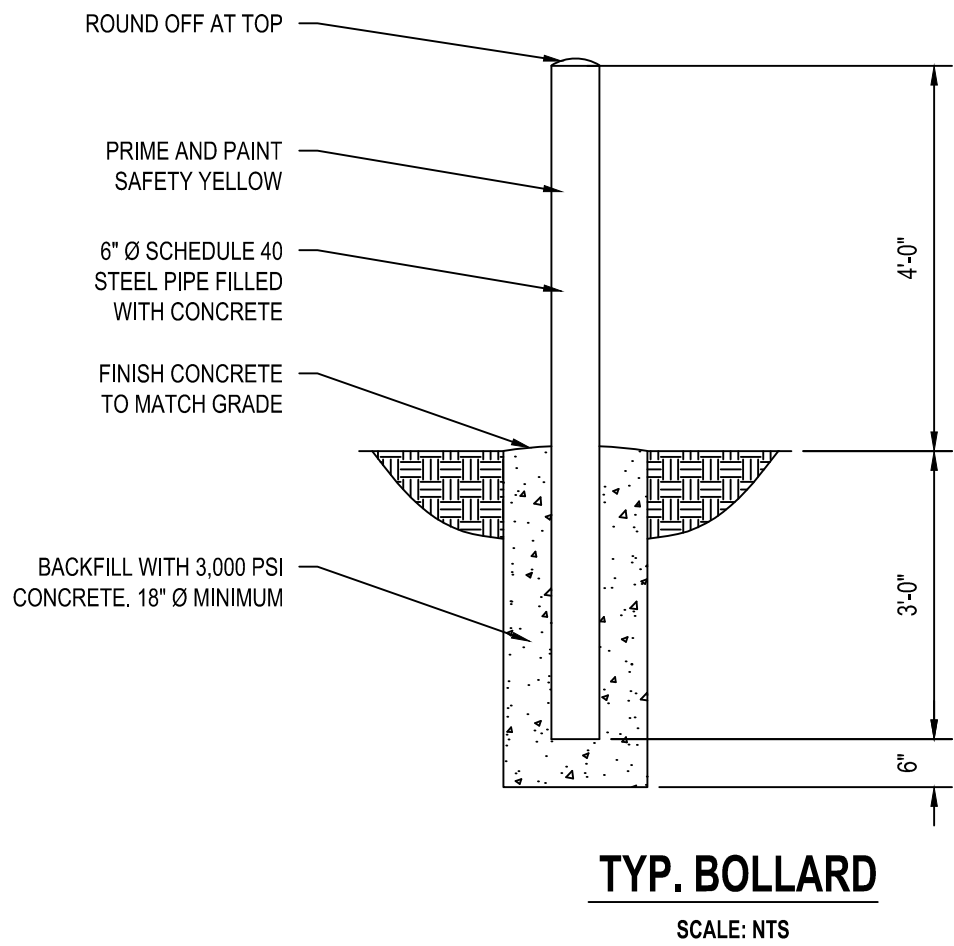
PRELIMINARY - NOT FOR CONSTRUCTION



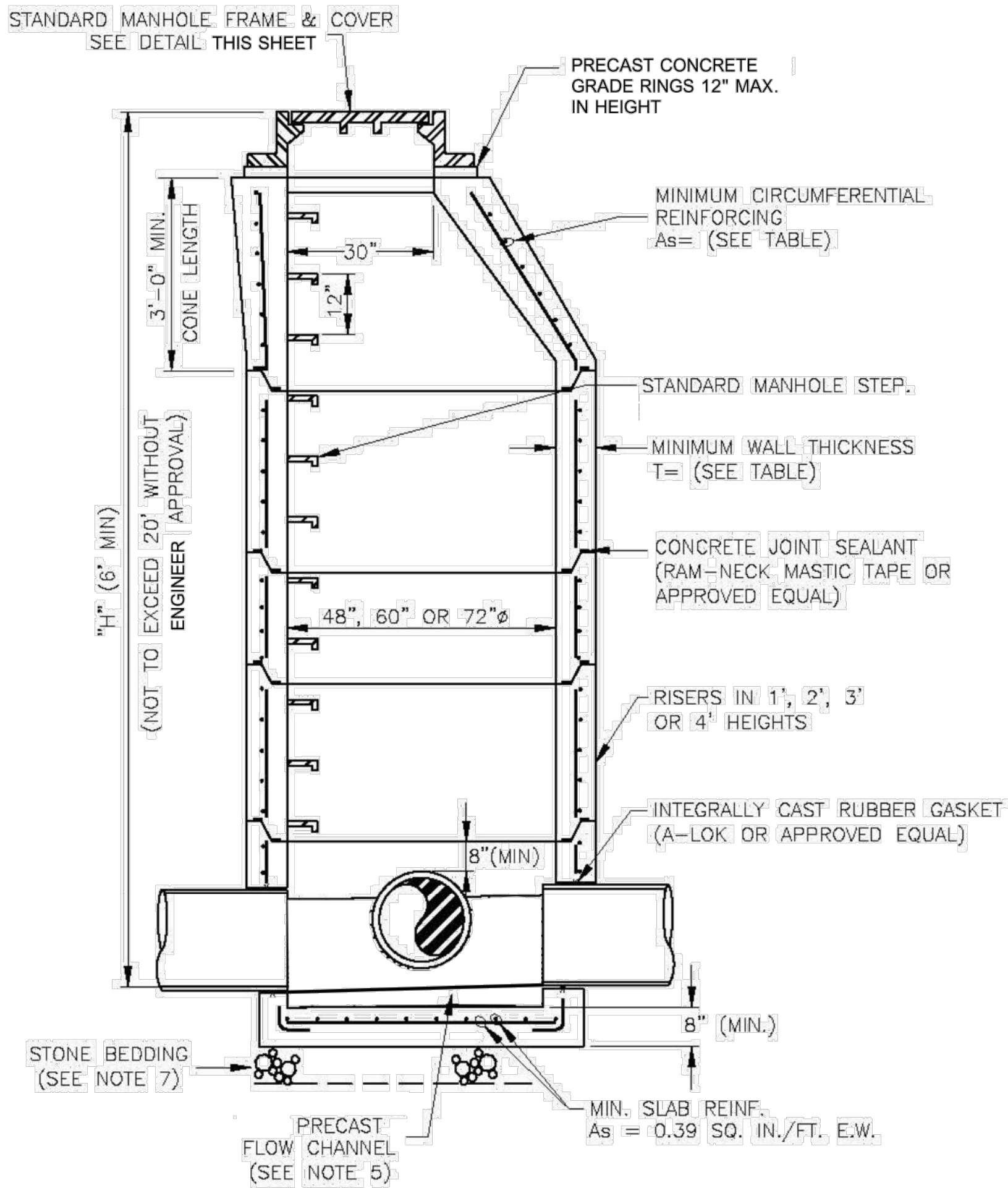


C-03





MANHOLE FRAME AND COVER  
SCALE: NTS

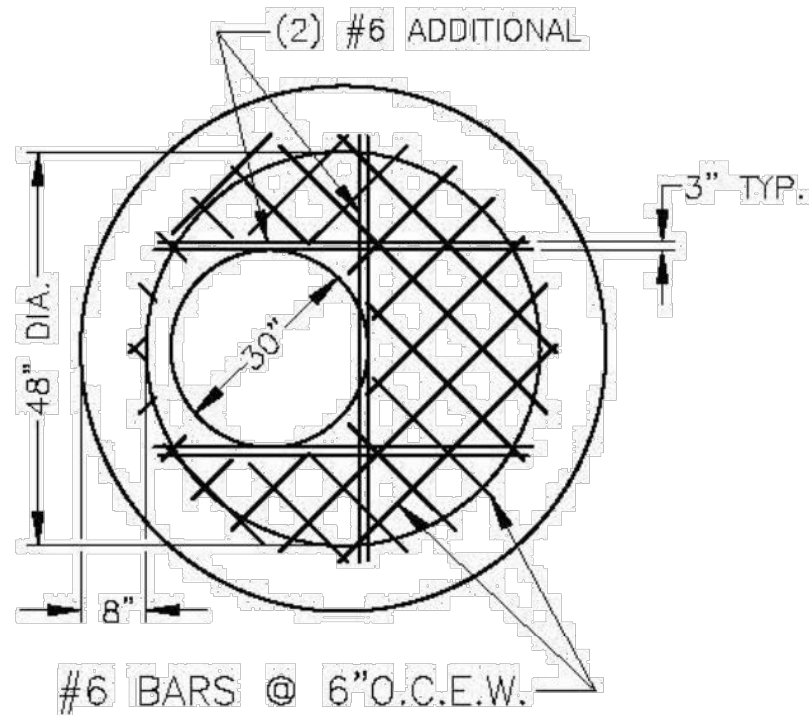


TYPE A-2 MANHOLE  
MIN 6' DEPTH

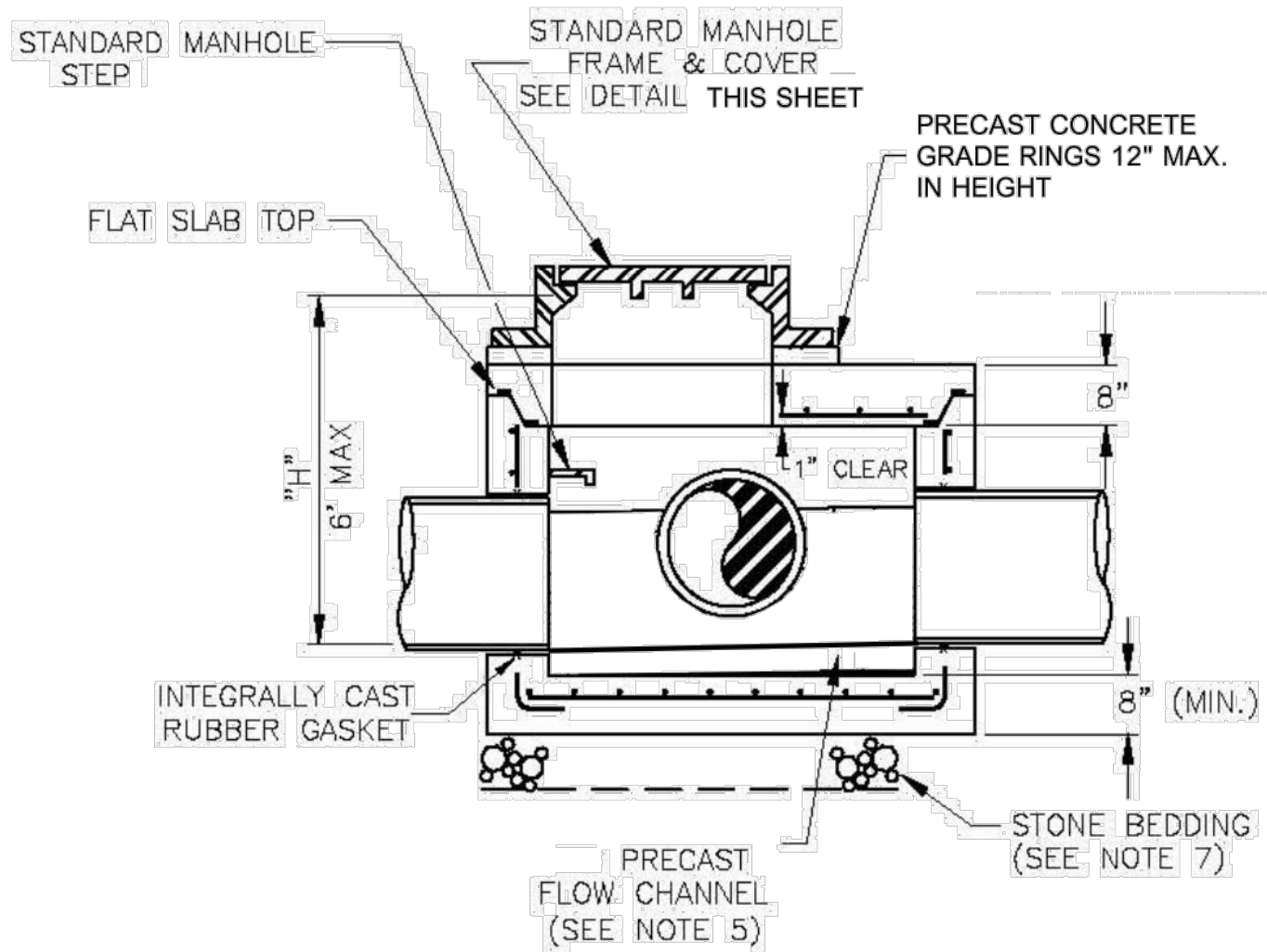
- NOTES:
- UNLESS OTHERWISE NOTED, MANHOLE CONICAL AND FLAT SLAB TOPS, RISERS AND BASE SECTIONS SHALL BE FURNISHED IN STRICT ACCORDANCE WITH ASTM DESIGNATION C478 (LATEST) FOR PRECAST REINFORCED CONCRETE MANHOLES. FLAT SLAB TOPS ARE PERMITTED FOR 72"Ø, TYPE A-2 MANHOLES.
  - ALL MANHOLES SHALL BE 5,000 PSI MIN. CONCRETE, TYPE II PORTLAND CEMENT.
  - REINFORCING FOR TYPE A-3 MANHOLE SAME AS TYPE A-2 MANHOLE, EXCEPT AS NOTED.
  - MANHOLE STEPS SHALL BE SPACED AS SHOWN IN A SINGLE VERTICAL ALIGNMENT, THE STEPS SHALL NOT BE STAGGERED. CENTERLINE OF STEP ORIENTATION TO BE ALIGNED OVER TOP OF BENCH AND NOT FLOW CHANNEL. BOTTOM STEP SHALL BE WITHIN 12" OF THE BENCH.
  - FLOW CHANNEL IN MANHOLE SHALL BE PRECAST CONCRETE (5,000 PSI MIN.) NO CAST IN PLACE FLOW CHANNELS. SLOPE OF BENCH TO BE 1/4"/FT. MIN. TOWARD CHANNEL.
  - SLOPE ACROSS MANHOLE CHANNEL TO BE 0.1' MIN.
  - STONE BEDDING SHALL CONFORM TO GRADATION AND QUALITY REQUIREMENTS OF #57 STONE PER AASHTO M43 AND ASTM C33.
  - INSTALL PLASTIC MANHOLE INSERT. PARSON ENVIRONMENTAL PRODUCTS, INC. OR EQUAL.

PRE-CAST CONCRETE MANHOLE  
SCALE: NTS

	48"	60"	72"
As SQ. IN./FT.	0.12	0.15	0.18
T IN.	5"	5"	6"



REINFORCEMENT  
FOR FLAT SLAB TOPS



TYPE A-3 MANHOLE  
MAX 6' DEPTH

PROJECT

Auburn Valley Master Plan  
Area Redevelopment  
of NVF Site  
Benge Road  
Pump Station Replacement

CLIENT

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KEY PLAN

PROJECT NUMBER

60593246

SHEET TITLE

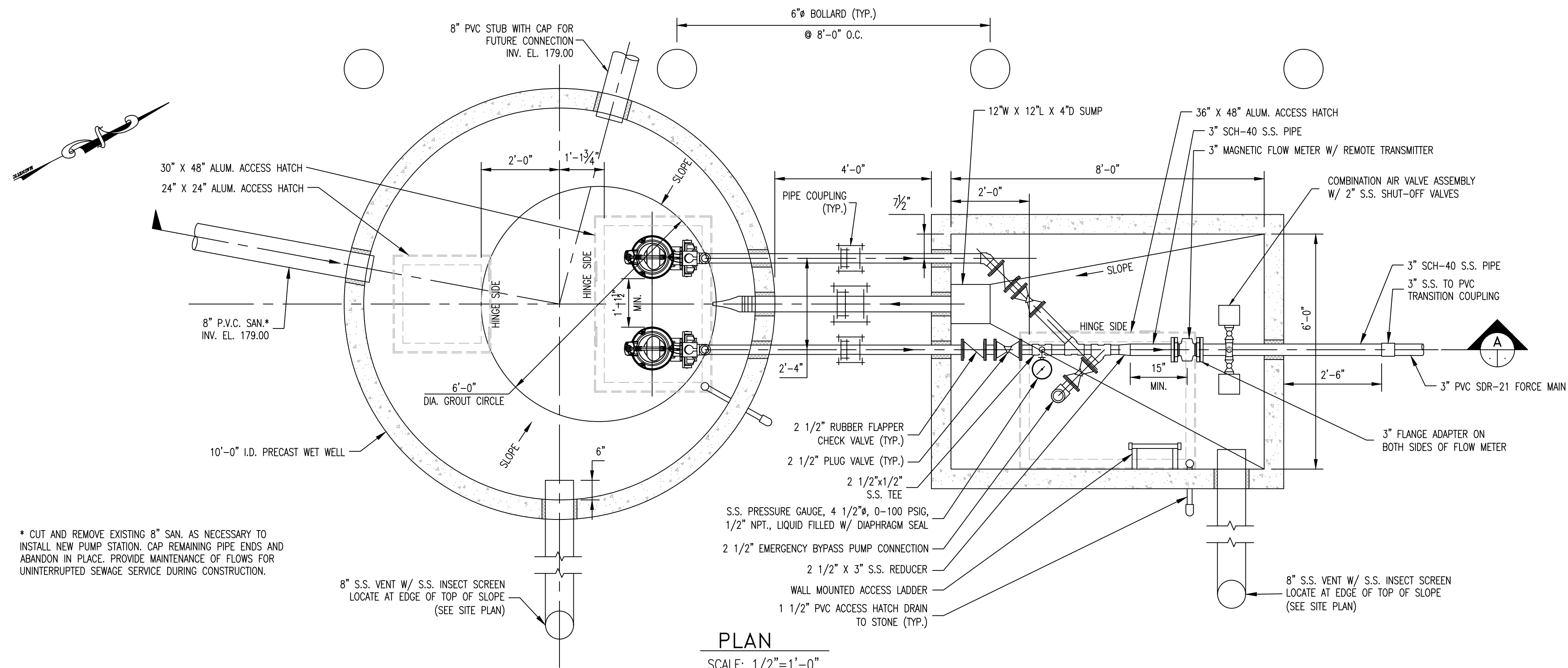
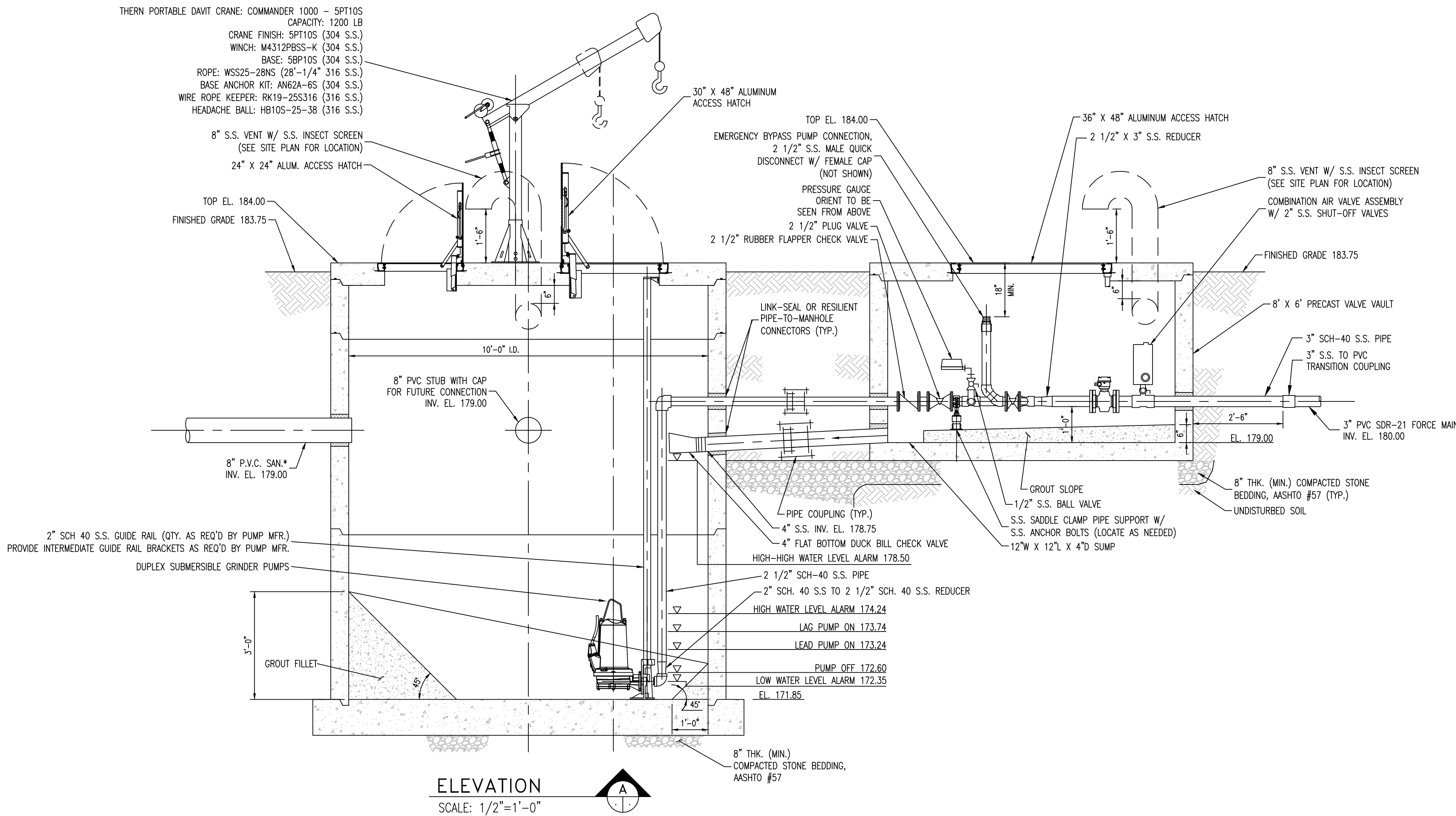
FORCE MAIN DETAILS 2

SHEET NUMBER

C-04

PRELIMINARY - NOT FOR CONSTRUCTION



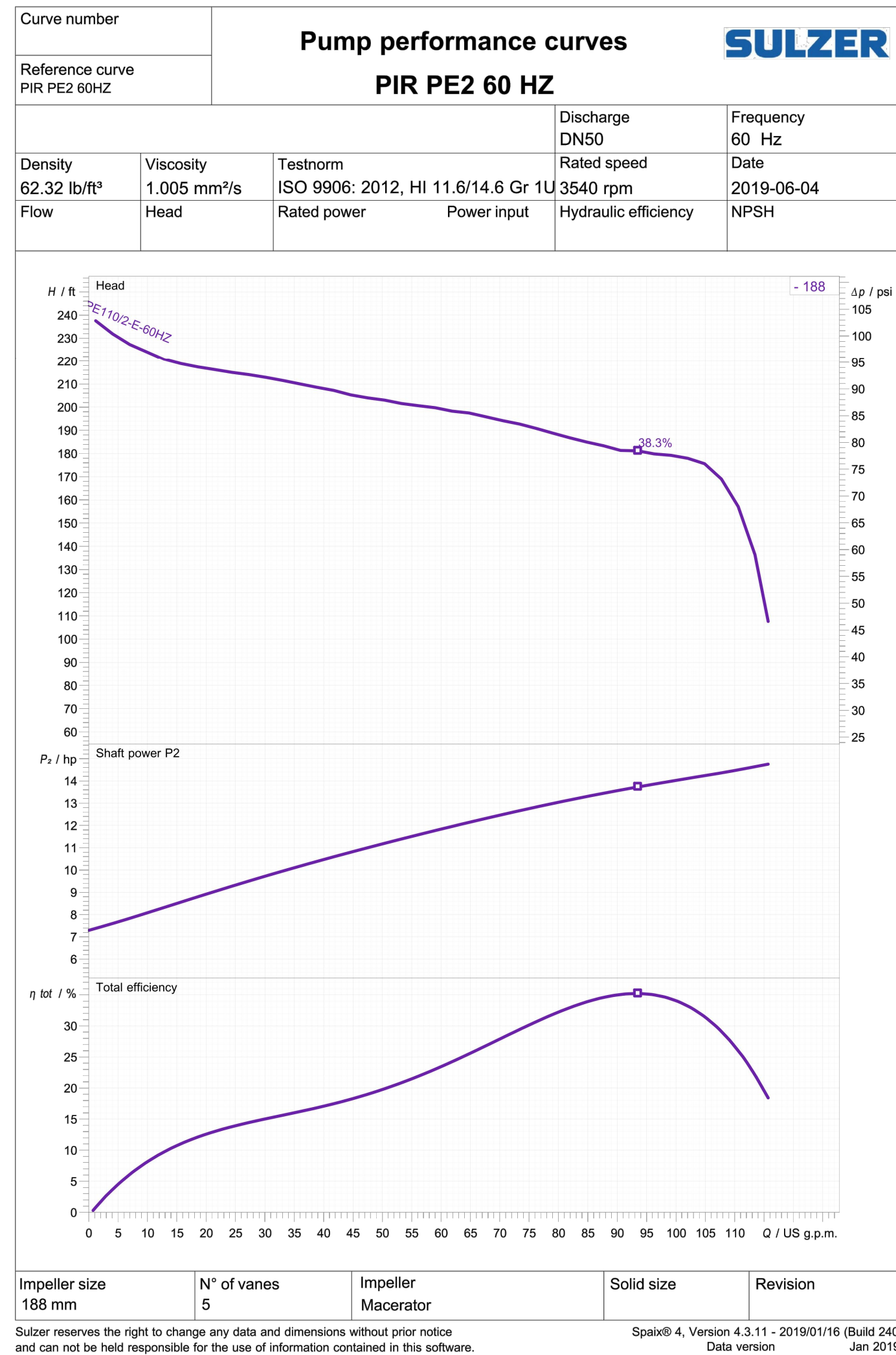
PLAN  
SCALE: 1/2"=1'-0"ELEVATION  
SCALE: 1/2"=1'-0"

## PROCESS PUMP SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE	RATING POINT				MIN. SUCTION/DISCHARGE SIZE (IN.)	PUMP RPM MAX.	SEAL TYPE	MOTOR DATA			DRIVE TYPE	GAUGE TYPE SUCTION/DISCHARGE	SPEC. SECTION	BASIS OF DESIGN	REMARKS
					CAPACITY (GPM)	HEAD (FEET)	MIN. WIRE-TO-WATER EFF. %	MIN. SHUTOFF HEAD FT.				HP	RPM (MAX.)	ENCL. TYPE					
RWWP-1&2	2	RAW WASTEWATER	BENGE RD PUMP STATION	SUBMERSIBLE GRINDER	82	185	31%	240	-- / 2	3450	TANDEM MECHANICAL	15	3550	SUBMERSIBLE EXPLOSION PROOF	CLOSE COUPLED	-- / 1	43 21 00.07	SULZER PIRANHA PE110/20-E	--

GAUGE TYPE:  
1 - GAUGE WITH PROTECTIVE DIAPHRAGM AND SNUBBER  
2 - GAUGE WITH PROTECTIVE PRESSURE SENSOR  
3 - INLINE SENSOR WITH PRESSURE GAUGE  
4 - GAUGE AND PRESSURE SWITCH WITH PROTECTIVE DIAPHRAGM AND SNUBBER  
5 - GAUGE AND PRESSURE SWITCH WITH PROTECTIVE PRESSURE SENSOR  
6 - INLINE SENSOR WITH PRESSURE GAUGE AND PRESSURE SWITCH

PRELIMINARY - NOT FOR CONSTRUCTION



## PROJECT

Auburn Valley Master Plan  
Area Redevelopment  
of NVF Site  
Benge Road  
Pump Station Replacement

## CLIENT

## STATE OF DELAWARE

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## CONSULTANT

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## SUBCONSULTANTS

## ELECTRICAL

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## REGISTRATION

## ISSUE/REVISION

NO.	DATE	DESCRIPTION
5	10/18/19	PER NCC COMMENT
4	8/21/19	FOR NCC APPROVAL
3	8/1/19	95% DESIGN SUBMITTAL
2	6/7/19	90% DESIGN SUBMITTAL
1	5/24/19	30% DESIGN SUBMITTAL
1/R	DATE	DESCRIPTION

## KEY PLAN

## PROJECT NUMBER

60593246

## SHEET TITLE

PUMP STATION  
PLAN AND SECTIONS

## SHEET NUMBER

D-01